



# AEROSPACE STANDARD

## AS 1072

Society of Automotive Engineers, Inc.

400 COMMONWEALTH DRIVE, WARRENDALE, PA. 15096

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Revised

### SLEEVE, HOSE ASSEMBLY, FIRE PROTECTION

#### 1. SCOPE

This standard defines the requirements for bulk protective sleeve to provide fire resistance for aircraft hose assemblies, which will enable these assemblies to meet the requirements of ARP 1055.

#### 2. REQUIREMENTS

2.1 Quality: All sleeves furnished under this standard shall comply with the requirements of ARP 1055 when installed on the appropriate aircraft hose assemblies.

2.1.1 When installed on the appropriate aerospace hose assembly, the cut ends of the sleeving shall be protected with material that is compatible with the cover in order to prevent wicking of fluid to the inside of sleeving.

2.2 Fluid and Temperature Resistance:

2.2.1 Butyl Rubber Type: The coating shall be Butyl rubber, grey or black in color, with green or silver identification markings, including the code "BTL".

2.2.1.1 Fluid Resistance: This sleeve shall be functional after exposure to the following fluids when tested as required in ARP 1055:

Phosphate ester type hydraulic fluids  
MIL-H-5606 hydraulic fluid  
MIL-T-5624 jet fuel  
MIL-L-7808 lubricating oil  
MIL-L-23699 lubricating oil  
MIL-H-83282 hydraulic fluid

Caution should be used in the selection of chlorinated cleaning fluids because of the possible damage to hose assemblies.

2.2.1.2 Temperature: This type of sleeve shall be usable in the range of  $-65^{\circ}\text{F}$  ( $-54^{\circ}\text{C}$ ) to  $+250^{\circ}\text{F}$  ( $+121^{\circ}\text{C}$ ).

2.2.2 Silicone Rubber Type: The coating shall be silicone rubber, orange in color, with black identification markings, including the code "SIL".

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- 2.2.2.1 **Fluid Resistance:** This sleeve shall be functional after exposure to the following fluids when tested as required in ARP 1055:

Phosphate ester type hydraulic fluids  
 MIL-H-5606 hydraulic fluid  
 MIL-T-5624 jet fuel  
 MIL-L-6082 lubricating oil  
 MIL-L-7808 lubricating oil  
 MIL-L-23699 lubricating oil  
 MIL-H-83282 hydraulic fluid  
 RM 193A-3 (exp.) Mobil lubricating oil

Caution should be used in the selection of chlorinated cleaning fluids because of the possible damage to hose assemblies.

- 2.2.2.2 **Temperature:** This type of sleeve shall be usable in the range of  $-65^{\circ}\text{F}$  ( $-54^{\circ}\text{C}$ ) to  $+500^{\circ}\text{F}$  ( $+262^{\circ}\text{C}$ ).

- 2.3 **Asbestos:** The asbestos, if used in the construction of these sleeves shall not show presence of chlorides when tested as follows (Beilstein Test):

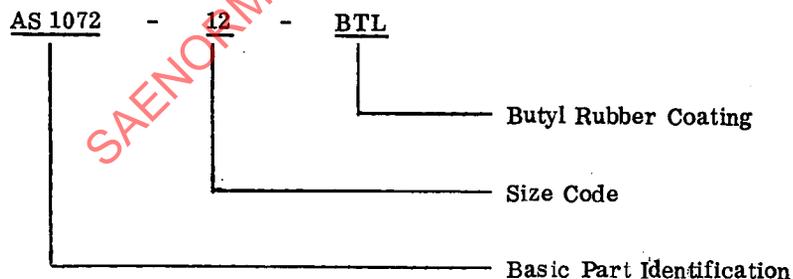
2.3.1 Using a Bunsen burner, or similar heat source, heat the tip of a piece of copper wire or strip until it glows bright red. This will burn off contaminants which may be present on the copper.

2.3.2 While still hot, rub the copper tip on the material to be tested.

2.3.3 Apply the copper to the flame again and observe the color of the flame. Any trace of green coloring in the flame indicates the presence of chlorides.

- 2.4 **Identification:** The sleeves shall be marked on the outer surface, parallel to the bore, with AS 1072, the dash number designating size and the coating description ("BTL", etc.) in 3/8 inch (10 mm) high characters. The marking shall be resistant to rubbing and the fluids called out in 2.2.1.1 or 2.2.2.1. The identification strip shall be repeated every 9 inches (228.6 mm) or less along the entire length of the sleeve.

- 2.5 **Example of Part Identification:**



PREPARED BY  
 SUBCOMMITTEE G-3D, AEROSPACE HOSE, OF  
 SAE COMMITTEE G-3, AEROSPACE FITTINGS, HOSE, AND TUBING ASSEMBLIES